Radio: The Old Days

Broadcasters That Followed Their Dreams

BY ALICE BRANNIGAN

Beginning in 1897, the University of Arkansas, Fayetteville, operated an experimental wireless telegraphy station. By 1916, voice transmissions had been added, and the station was operating under the Special Land Station call letters 5YM. Ray Poindexter's book, *Arkansas Airwaves* (published by its author, N. Little Rock, Ark., 1974) states that a federal order closed down civilian stations during much of World War I. That meant 5YM was dismantled between 1917 and 1919, but it returned after that. The popularity of the transmissions from 5YM led the University to apply for a non-commercial broadcasting license.

As a result of the application, on December 4, 1923, a license was issued with the call letters KFMQ. The station was authorized to operate on 1140 kHz with 100 watts. KFMQ was constructed by the Dept. of Electrical Engineering, and situated in a small structure south of the Engineering Hall. The antenna, a 100-foot long inverted "L" with its fan-type counterpoise located 35 feet below, was erected 100 feet above the Engineering Hall. KFMQ, *The Voice of The Ozarks*, began operation on January 4, 1924.

By December of 1924, KFMQ had shifted to 1090 kHz and upped its power to 500 watts. Its new operating location was in the UOA's Administration Building. By February, 1925, KFMQ was moved to 1000 kHz.

The year 1926 saw more adjustments. In February, KFMQ changed its call letters to KUOA. During KUOA's normal summer vacation shut-down period, a new 750-watt transmitter was installed because a higher power had been approved. KUOA resumed in September with its new power, but in April of 1927, the Federal Radio Commission moved KUOA to 1010 kHz and chopped back its power again to 500 watts.

In March of 1928, KUOA was allowed to increase its power to 1 kW, and told to move to 1390 kHz. There was a catch. KUOA would no longer have its own full-time frequency, but would have to share air time on 1390 kHz with Little Rock's KRLA. By summer of 1929, the Federal Radio Commission had whittled KUOA's air time down some days of the week to a mere four and a half hours. KUOA didn't operate Sundays, and it was normally dark during school summer vacation time. It was barely on the air at all!

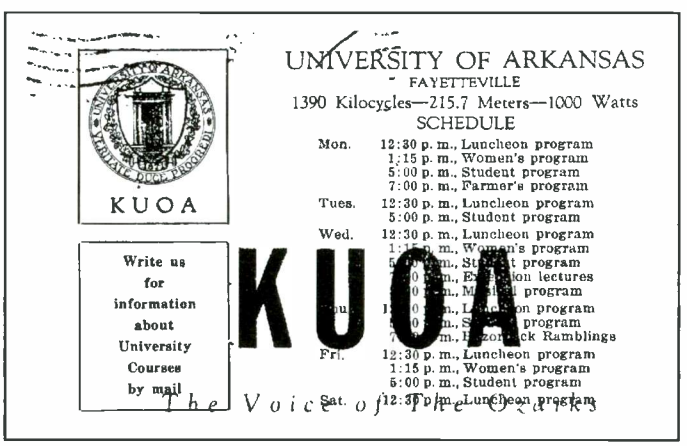
KUOA's sparse air-time situation wasn't unusual during that era. It was described in George H. Douglas' book, *The Early Days of Radio Broadcasting* (McFarland & Co., Jefferson, N.C., 1987). Douglas wrote, "Nearly all stations owned by educational institutions felt themselves very ill-used by the Commission. Many got what they considered bad frequencies, and worse, the majority had to accept daytime-only licenses. For instance, the University of Arkansas station was forced to share time with a local commercial station—with the commercial station getting three quarters of the time, including all the nighttime hours...The same thing happened to many educational stations throughout the late 1920s. In the years before the Radio Act of 1927, dozens of educational stations entered the field every year.

"Starting around 1928, they began dropping off like flies: 23 stations gave up in 1928 alone. Many educational stations had begun operation with the idea of offering nighttime adult education courses, but, cheated out of this time slot, saw no purpose in continuing."

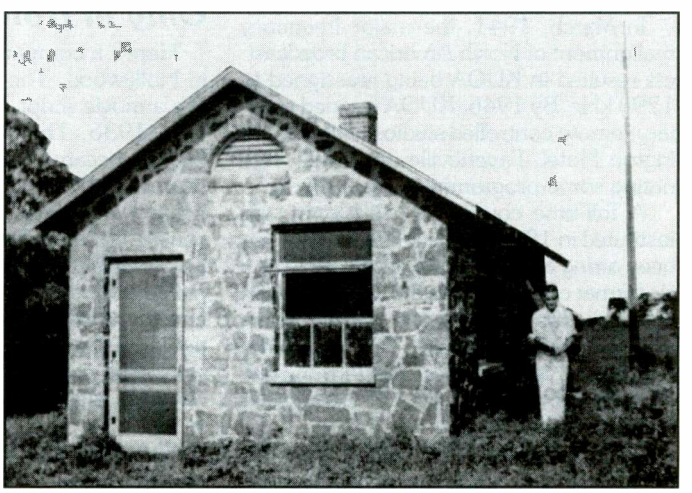
KUOA had plenty of Ozark grit. Determined to continue its dream of broadcasting, the station took a new approach. In July, 1931, KUOA was leased to the Southwestern Hotel Co., owners of the Goldman Hotel, Fort Smith, Ark. Cleverly, KUOA had become a commercial station! The studios and transmitter remained at the UOA campus until February of 1933 when there was a fire at the studio.

As a commercial venture, KUOA was so successful that, in early 1933, the UOA sold it to the hotel company and the Publisher of *The Fayetteville Daily Democrat* newspaper. They moved it to downtown Fayetteville. By April of 1933, KUOA had been granted the right to shift to 1260 kHz where it could operate daytime as a commercial station without having to share hours! The station's 1 kW transmitter was relocated to Mt. Sequoyah, northeast of Fayetteville.

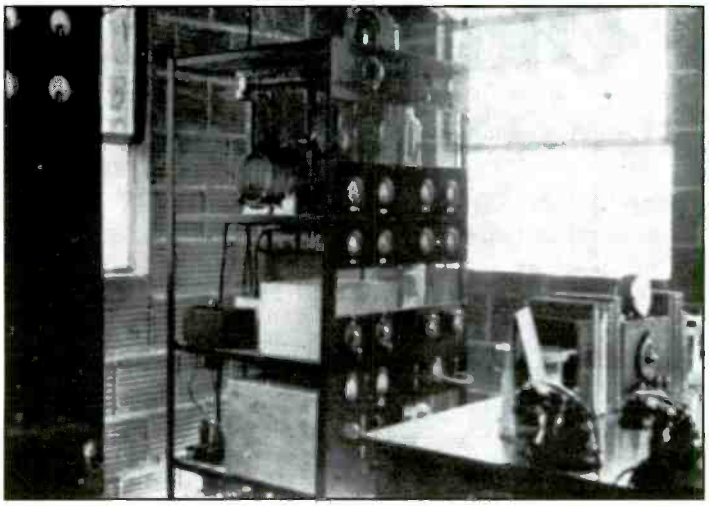
In June of 1935, the station was sold to


UNIVERSITY OF ARKANSAS
FAYETTEVILLE
1390 Kilocycles—215.7 Meters—1000 Watts
SCHEDULE
Mon. 12:30 p. m., Luncheon program
1:15 p. m., Women's program
5:00 p. m., Student program
7:00 p. m., Farmer's program
Tues. 12:30 p. m., Luncheon program
5:00 p. m., Student program
Wed. 12:30 p. m., Luncheon program
Fri. 12:30 p. m., Luncheon program
1:15 p. m., Women's program
5:00 p. m., Student program
KUOA
Write us for information about University Courses by mail
The Voice of The Ozarks

This 1932 QSL from KUOA shows how its schedule had been whittled down due to having to sharing a frequency with a commercial station.

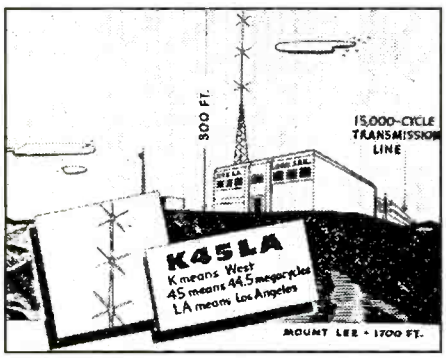


The KUOA transmitter building atop Mt. Sequouah in 1933.

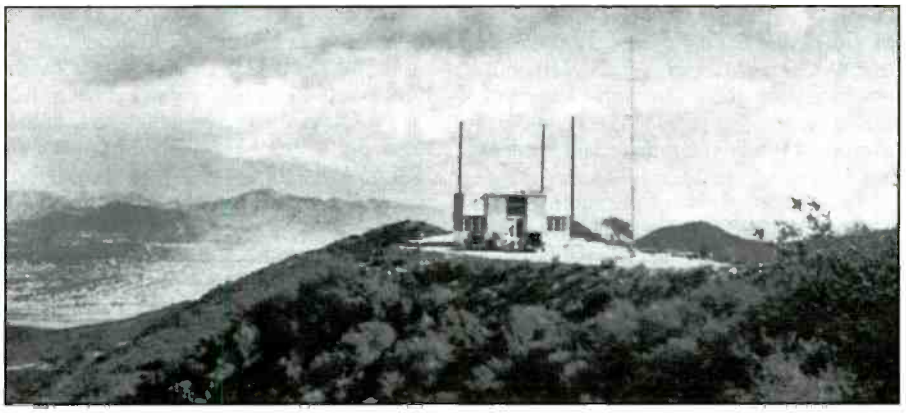


The KUOA 1 kW transmitter, as used in 1933.

KOUA's transmitter building, Siloam Springs, Ark., as it looked in 1967. It was constructed in 1936. (Photo by Jan D. Lowry, Calif.)



An artist's conception of the K45LA appeared on the station's 1941 QSL card.



Don Lee Company's K45LA atop Mt. Lee in Hollywood, as it appeared in 1941.

John Brown University of Siloam Springs, Ark. Late that year, the new owners sought permission to change KUOA into a 50 kW station known as KPSN, *The People's Station of the Nation*. The concept was later abandoned, but in 1936 KUOA did increase its power to 2.5 kW when the station's facilities were relocated to Siloam Springs. In September of 1937, the power was upped to 5 kW.

In March, 1941, the major frequency realignment of North American broadcasters resulted in KUOA being reassigned to 1290 kHz. By 1946, KUOA opened auxiliary remote controlled studios at the Washington Hotel, Fayetteville, and was originating some programming from there.

A full-time country music format was instituted in 1974. Since 1993, KUOA has been airing a satellite-delivered county music format obtained from the Jones Satellite Network. KUOA operates daylight hours on 1290 kHz with 5 kW. The transmitter is in Siloam Springs, Ark. KUOA is the oldest continuously licensed AM broadcaster in Arkansas!

Special thanks to Broadcast Pro-File, P.O. Box 982, Hollywood, CA 90078-0982. We excerpted most of the information about KUOA from their lengthy reference report on the station. Broadcast Pro-File can furnish, at reasonable cost, detailed, accurate, historical reports about any American AM, FM, or TV broadcast station, past or present. Many broadcasters use their services. A catalog is available from Broadcast Pro-File for $1.00.

The Don Lee Story: Only in Hollywood!

Here's a company that could exist only in Hollywood. The events make it sound like a movie script. Yet it's all true.

In 1936, The Don Lee Broadcasting System became fascinated with the concept of FM'casting, as described by Maj. Edwin Armstrong. The company's dream was to place an FM station on the air in Los Angeles. Given the simple fact that the public owned no FM receivers, and therefore there was no audience for such a station, the Don Lee folks were longer on wonderful dreams than on hard logic. That never stood in their way. This was business as usual.

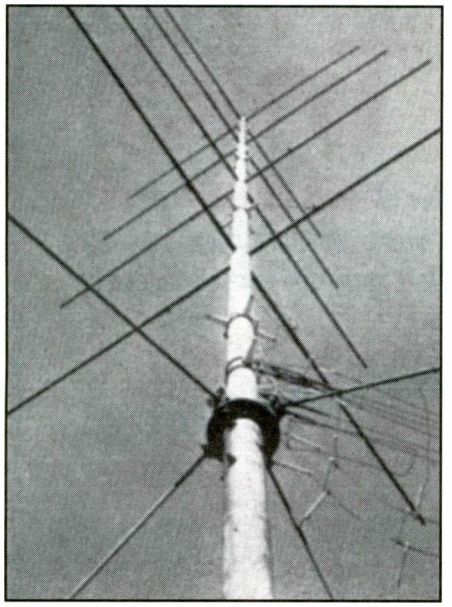
Following the publication of Armstrong's article in the *Proceedings*, they asked their FM Engineer, Frank M. Kennedy, to design an FM broadcast transmitter in accordance with Armstrong's published circuits and data. The unit wasn't built for lack of a suitable site to locate the transmitter.

The Lee Co. decided it had to create a site. When space to accommodate the proposed FM station on 1,700 ft. Mt. Lee, in the Hollywood Hills, was completed, they applied for an FM broadcast license. The FCC authorized operation on 44.50 MHz, and issued the call letters K45LA.

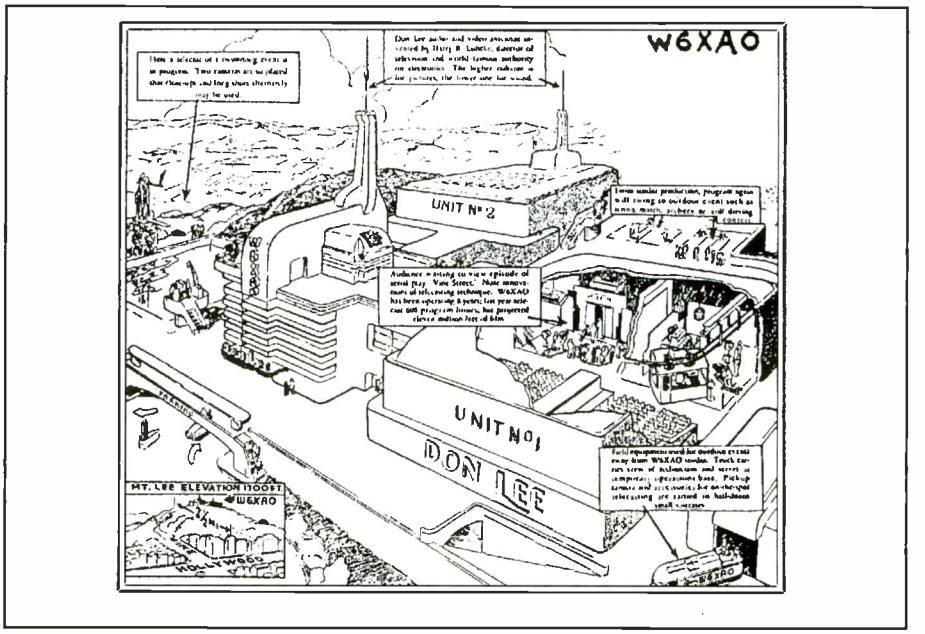
Mt. Lee had been selected because it had become the site of the Don Lee pioneer TV station, W6XAO. At this point we need to backtrack our narrative a bit.

In December, 1931, when there were but four TV receivers in Los Angeles, Don Lee spent an extravagant $500,000 to open his TV experimental station, W6XS on 2.1 to 2.2 MHz, from Gardena, Calif. W6XS transmitted an 80-line low-definition electron beam picture. This was the first television station in the American west; it maintained a modest daily schedule.

In 1933, Lee wanted to upgrade the W6XS transmission definition to 300-lines, 24-frames. In order to accomplish this, a wider bandwidth was required. Therefore, the station's frequency was shifted to 45.00 MHz for video, and 49.75 MHz for audio.



Looking skyward at the K45LA antenna from its base. It was assembled on wooden horses and later raised, complete.



By 1939, W6XAO issued this artist's idealized conception of the new TV facilities on Mt. Lee.

The change caused a new license to be issued bearing the call letters W6XAO, replacing W6XS. The daily broadcast schedule was continued. Soon enough, W6XAO's future changed when, unfortunately, in August of 1934, Don Lee died.

Don Lee had been a wealthy and flamboyant Cadillac dealer who had gotten into radio when he purchased station KHJ in 1927. KHJ had been a profitable venture for him. Upon Don Lee's death, his GM dealerships were cancelled. His broadcasting interests were continued, though not with the participation of his son and heir, Thomas Lee. His son had no interest in the business and didn't want to assume the responsibility. The courts judged him incompetent, and the Don Lee Broadcasting officers took over operation of the company, under the direction of Willet Brown.

This 1924 QSL from pre-Don Lee KHJ shows (upper left) the L.A. Times Building, with the antennas on the roof. (Courtesy of POP'COMM's Cathy Ross. The QSL was earned by her dad, Paul Hofer, Jr.)

Thomas Lee retired to the elegant castle Don Lee had once imported brick by brick from Ireland, and then reconstructed at Lancaster, Calif. On its grounds were an auto race track and an airfield. Thomas Lee had his own race cars, his plane with a pilot, and a nurse. He took no part in running the company.

Willet Brown, on behalf of the company, purchased 20 acres of Mack Sennett's failed "Hollywoodland" real estate venture at the eastern boundary of Griffith Park. This was atop the 1,700-foot hill that then had the *Hollywoodland* sign spelled out in huge letters.

The sign achieved world notoriety in 1932 because of 24-year-old British starlet Peg Entwistle. After securing only a bit part in David Selznick's 1932 film *Thirteen Women*, she felt Hollywood had rejected her talents. Thereupon, Entwistle stripped off her clothing and leapt to her death from the top of the thirteenth letter of the sign. Peg was only the first of several failed starlets to use the sign for this tragic purpose. Today the sign is a tourist attraction, but reads only "Hollywood."

Brown renamed his purchase Mt. Lee, and in 1939 he had TV Engineer Harry Lubcke design and build luxurious new W6XAO television facilities there. W6XAO's transmission quality was upgraded to 525-lines at 30-frames, and began from Mt. Lee in December of 1940.

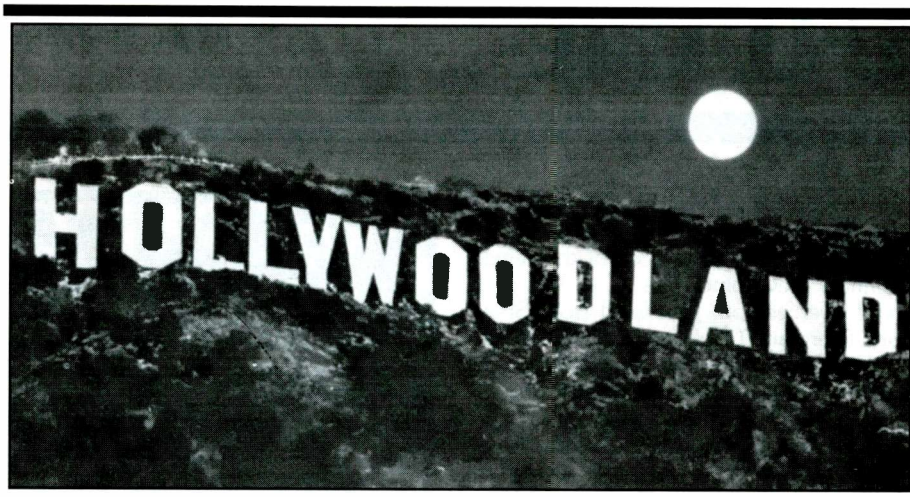
K45LA construction began soon after the W6XAO Mt. Lee facilities started. Mt. Lee had also become the location of the 5 kW transmitting facility used by KHJ, Don Lee Broadcasting's AM station on 930 kHz. KHJ had first gone on the air in 1922 as C.R. Kieruff's front-room 5 watt station. KHJ was soon purchased and improved by the *Los Angeles Times*. In 1927 the *Times* sold the 500-watt station to Don Lee. Legend says Lee paid the staggering price (for those days) of $500,000.

The Don Lee KHJ studios were seven miles away, and fed to the AM transmitter by regular landline. FM programming was planned to originate from the AM studios, but be delivered to the FM transmitter over a special 15 kHz high fidelity landline.

Engineer Frank Kennedy decided to use an omni-directional FM turnstile antenna on a tower mounted atop the FM transmitter building. A 50 kW Western Electric transmitter couldn't be obtained immediately, but was placed on order. Arrangements were made to secure the immediate delivery of a 1 kW Western Electric FM transmitter.

That 1 kW K45LA transmitter on Mt. Lee reached out and covered a total of 6,944 square miles.

Kennedy's FM installation plans had to take into consideration how and if the three broadcast facilities could be operated suc-



The jinxed "Hollywoodland" sign atop what later became Mt. Lee, site of the Don Lee broadcast facilities.

cessfully in relatively close proximity. He was wondering what interference the 50 kW FM signal might cause to the TV cameras, landline studio/transmitter links, or telephone communications.

With respect to this, Kennedy decided to locate the FM building about 450 feet away from the TV facilities. All telephone and power lines were buried within 150 feet of either building, and all lines were below the top of Mt. Lee.

K45LA commenced operation on August 11, 1941. It was the first FM broadcast station in the far west. With its noon to midnight daily schedule, K45LA managed to carve a niche for itself, even in a market where there were no FM receivers. Within the first month of K45LA's operation, at least 2,000 FM receivers were sold! Some of KHJ's AM programs were simulcast, but the FM station originated many of its own programs.

By 1946, K45LA had become renamed KHJ-FM, and the station had migrated to the FCC's newly created FM band, situated between 88 and 108 MHz. At first, KHJ-FM used 99.7 MHz, then later was shifted over to 101.1 MHz.

In May of 1948, Lee Broadcasting got approval to operate W6XAO as commercial TV station KTSL on Channel 2. By November, 1949 plans were being made to move the KTSL transmitter to Don Lee Broadcasting property on Mt. Wilson, and the studios to the new Don Lee building at 1313 N. Vine Street. Lamentably, in January, 1950, during the move, Thomas Lee committed suicide by leaping from the seventh floor of the Wilshire Building. This tragedy meant that Don Lee Broadcasting had to be liquidated to satisfy the heirs.

The KTSL move was completed, but KTSL station was sold to CBS. General Tire and Rubber purchased the AM and FM stations. A General Tire subsidiary, General Teleradio, was formed to operate the AM and FM stations, and that company later purchased Los Angeles TV station KFI-TV, Channel 9, then changed its call letters to KHJ-TV. The Walt Disney Co., now owns this station, calling it KCAL.

The present heir to K45LA/KHJ-FM's legacy is KRTH. This station still operates on 101.1 MHz, but is no longer located on Mt. Lee. KRTH has its antenna at 3,130 feet, and operates with more than 50 kW. Since 1989, the station has been owned by the Beasley Broadcasting Group. The station runs an oldies format.

The current incarnation of KHJ, Don Lee's original AM station, is Spanish language station KKHJ, 930 kHz. New owners here, too.

The Mt. Lee site is now primarily used for communications facilities of the CHP and Los Angeles County Sheriff Dept.

Special thanks to Warren Wells, Los Angeles, Calif., whose monograph on the history of TV Channel 9 in Los Angeles was a rich source of information about the TV activities of Don Lee Broadcasting.

We always appreciate reader input in the form of old time radio and wireless photos, old QSL's, station listings, picture postcards relating to radio, memories, news clippings, ideas, and questions. It's what we use to put this column together.

Next month I'll be on vacation, but there will be a fascinating article here by Ronald R. Thomas that I know you'll enjoy. ■

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